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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,037	03/30/2004	Atsushi Saito	119081	1419

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EXAMINER

KUGEL, TIMOTHY J

ART UNIT PAPER NUMBER

1712

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/812,037	<b>Applicant(s)</b> SAITO, ATSUSHI	
	<b>Examiner</b> Timothy J. Kugel	<b>Art Unit</b> 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 7-10 and 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 11-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-17 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>see attached</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-17 are pending as filed on 30 March 2004. Claims 7-10 and 15-17 are withdrawn from further consideration.

#### ***Election/Restrictions***

2. Applicant's election, with traverse, of the claims of Group I, claims 1-6 and 11-14, in the reply filed on 21 June 2006 is acknowledged. The traversal is on the grounds that the subject matter of all of the groups of claims is sufficiently related so as to not constitute a serious burden of additional search. This is not found persuasive because a search of the non-elected claims would require at least a search in an additional class and of a method and device along with the elected composition, which would constitute a serious burden.

The requirement is still deemed proper and is therefore made **FINAL**.

3. Claims 7-10 and 15-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 21 June 2006.

#### ***Priority***

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

5. The information disclosure statements submitted on 30 March 2004 and 29 December 2005 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statements.

6. Regarding the reference Japanese Patent Publication JP 4-332404, the information disclosure statement filed 24 February 2006 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but unless it has been cited on the Notice of References Cited PTO-893, the information referred to therein has not been considered.

***Drawings***

7. Figure 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

8. A series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim.

A claim that depends from a dependent claim should not be separated by any claim that does not also depend from said dependent claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. In general, applicant's sequence will not be changed. See MPEP § 608.01(n).

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 1-6 and 11-14 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for epoxies, amines, imidazoles, acid anhydrides, and phenols for the first substance of claims 1, 2, 3, 5, 6, 11, 13 and 14 and second substances of claims 1, 2, 4, 5, 6, 12, 13 and 14 and for amines, imidazoles, acid anhydrides, and phenols for the third substance of claims 6 and 14, does not reasonably provide enablement for any substance to be the first, second and/or third substance. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

Since the breadth of the instant claims, nature of the invention and state of the adhesive art allows for literally thousands of substances to be potential first, second

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and/or third substances and since reactions and conductivity testing would need to be made for each combination and since the inventor has provided little direction and no working examples; one of ordinary skill would require an undue quantity of experimentation to make the invention based on the content of the disclosure.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-4, 6, 11, 12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent Application Publication 2002/0084019 (Date hereinafter).

Date teaches an anisotropic conductive adhesive comprising an agent 'A' selected from components, an acrylic monomer, a peroxide, a reducing agent, an epoxy resin precursor, a curing agent and a microcapsule-type conductive filler obtained by coating conductive fine particles with an insulating resin and containing at least one or two of the acrylic monomer, the peroxide and the reducing agent, and an agent 'B' comprising all of the remaining components which are not selected in 'A' (¶0024) and wherein the curing agent can be an acid anhydride (¶0037).

13. Claims 1-3, 5-11, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,302,456 (Matsui hereinafter).

Matsui teaches an anisotropic conductive (Column 2 Lines 12-20) adhesive (Column 3 Lines 50-63) composition comprising microcapsules dispersed in a resin

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matrix wherein the microcapsules comprising conductors, an acting material and a wall member formed of an insulative material (Column 2 Lines 12-20) wherein the insulative material may be a thermoplastic resin or an epoxy (Column 2 Lines 21-31), the acting material may include amines, imidazoles and phenols (Column 3 Line 50 – Column 4 Line 10), the conductors may be conductive particles (Column 3 Lines 42-46) and the resin matrix may be an epoxy mixed with acrylate resins and heat curing agents (Column 4 Lines 11-31).

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 5,194,502	03-1993	Saito et al.
JP 08-003529	01-1996	Noriyuki et al.
WO98/44067	08-1998	Watanabe et al.
US 6,429,382	08-2002	Amami et al.
US 6,777,464	08-2004	Watanabe et al.

Please note that US Patent 6,777,464 is an English language equivalent to International Patent Application Publication WO98/44067 (Watanabe hereinafter).

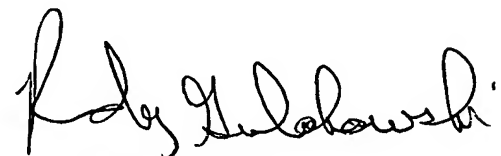
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Kugel whose telephone number is (571) 272-1460. The examiner can normally be reached 6:00 AM – 4:30 PM Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJK  
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A handwritten signature in black ink, appearing to read "Randy Gulakowski".

RANDY GULAKOWSKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700